ZHIYUAN WANG

Address: 1234 W 37th Pl Apt 4, Los Angeles, CA 90007
Mobile: (213)245-7824 | E-mail: wangzhiy@usc.edu

EDUCATION

University of Southern California (USC) Los Angeles, CA
M.S. in Computer Science; GPA: 3.85/4.0 August 2016 – May 2018
Zhejiang University (ZJU) Hangzhou, China
B.Eng. in Information Engineering; GPA: 3.87/4.0; Outstanding Graduate September 2012 – June 2016

TECHNICAL SKILLS

- Proficient in C++, Java, Python, C, MATLAB, Linux, git, OpenCV, Caffe, Visual Studio, Eclipse, Emacs
- Familiar with JavaScript, AJAX, jQuery, Bootstrap, AngularJS, PHP, Android

WORK EXPERIENCE

Graduate Research Assistant USC
Unlocking Map: Automatic Metadata Creation for Digital Collections January 2017 – present
- Design, implement and test algorithms extracting and recognizing text in map images.

Research Software Development Intern WonderGate
Stereo Panoramic Rendering System April – June 2016
- Built a stereo panoramic scene rendering system with unprecedented high quality.
- Taking images captured from various directions as well as depth information as input, produced high-quality rendering results for GearVR HMD.
- Unlike existing solutions, the novel solution produces result free of rendering and stitching artifacts and reproduced realistic 3D effect for the viewer.
- Designed and implemented core stitching algorithm; refactored the rendering code to reduce memory footprint by a factor of 18x.

PROJECTS

Congress Information Search Android App November 2016
Java, PHP, AWS
- Built an App product on Android; Implemented information searching, filtering and displaying for congress legislators, bills and committees.
- Implemented back-end PHP script running on AWS to request and retrieve JSON from RESTful API web server.
- Implemented four fragment activities in Android App, each with several tabs containing list of results; Used AsyncTask to request and retrieve search results with back-end AWS server.

Congress Information Search Webpage October 2016
JavaScript, AJAX, Bootstrap, AngularJS, PHP, AWS
- Built a responsive webpage with functions including information searching, filtering and displaying for congress legislators, bills and committees.
- Implemented webpage using JavaScript, with AngularJS framework and Bootstrap. Used AngularJS Pagination, Bootstrap Form and Carousel.

Pedestrian Detection Based on Deep Learning February – June 2016
Python, Caffe, C++
- Implemented image-based pedestrian detection in Caffe framework, with Average Precisions (AP) reaching 85.1%, boosted 10% from original best algorithms.
- Adopted Selective Search algorithm extracting proposal, Fast R-CNN as detector, and AlexNet and VGGNet as network structure.
- Pre-trained the networks on ImageNet dataset, fine-tuned on INRIA Pedestrian Image Train dataset, and tested on INRIA Pedestrian Image Test dataset.